

# AQUILA TORNADO



Innovative “**WITHOUT LEVER**” - **CONTACTLESS**  
hydraulically operated super-automatic tyre changer  
with wheel diameter selection.  
Can handle all types of wheels from 13” to 32”.

**AUTOMATIC** demounting cycle

with the PREMIUM version

**NEW**



automotive service equipment

**AQUILA TORNADO** is the innovative **“WITHOUT LEVER”** and **CONTACTLESS** tyre changer for the most demanding professionals.

The increasing use of alloy, chromed and painted rims requires professionals to never touch the rim during work, even with plasticised components.

The rim diameter pre-selection, with the relevant automatic positioning of the wheel with respect to the **REVOLVER TOOL** and the co-ordinated movement between the wheel's axle and the **REVOLVER TOOL** ensure great ease of operation and excellent precision.

The key features detailed below are the strengths of this revolutionary tyre changer that can handle **any types of wheels for cars and light transport vehicles from 13" to 32"**:

- Hydraulic operation;
- Synchronised movements between wheel and work tools;
- REVOLVER tool (4 tools) with 3 automatic rotation positions;
- 3 new patents pending to deliver the best advantages to the operator.

1. REVOLVER tool (4 tools) with 3 automatic rotation positions.
  2. Bead pressing tool.
  3. Intelligent electromechanical turntable with HYDRAULIC axial movement.
  4. LIFTERS:
    - Side lifter with vertical lift (80 kg);
    - Premium lifter with comple-movement ascent and descent (85kg)
- Side lifter with vertical lift (80 kg).
5. Latest-generation inverter motor.
  6. Ergonomic pedal controls.
  7. Manually adjustable tool for the assembly of the first bead.
  8. Lower bead breaker disc and lower assembly tool with separate movement.
  9. Hydraulic power unit.
  10. Mobile control console.
  11. INFLATRON electronic inflator (fitted as standard in the SUPER and PREMIUM versions).
  12. Interactive multifunctional TFT-LCD TOUCH SCREEN interface with microprocessor control.

During the various work phases, the display shows:

- Rim diameter electronic selection with subsequent automatic radial positioning of the wheel (micro-adjustment also possible).
- always active CAMERA that can be recalled from the display (fitted as standard equipment in all versions, with the exception of the BASE version).
- TPM-02 Reader: valve sensor reader with key data display (fitted as standard only in the PREMIUM version).
- TREAD DEPTH SENSOR: measurement of tread depth with three views different colours to check depth thresholds (fitted as standard only in the PREMIUM version).
- TEMPERATURE MEASUREMENT SENSOR: real-time tyre and bead temperature sensor. User-friendly colour-coded indications (as standard only in the PREMIUM version).





## STAGE 1 Wheel dimension setting

- ✓ The interactive **touch-screen** supports the setting of wheel dimensions in inches and the radial self-positioning of the wheel with respect to the AUTOMATIC REVOLVER TOOL.

**AQUILA TORNADO** is the first machine where the **wheel axle moves at the same time as the tool**, to ensure precision and effectiveness.



Lifter foot controls.



**NEW**

Command lever on the PREMIUM lifter.



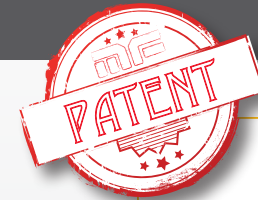
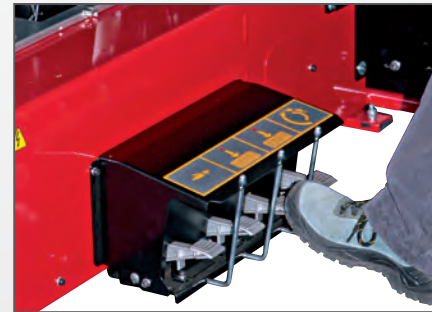
Side lifter with vertical lift and **automatic turntable movement** to facilitate wheel loading.

Interactive touch screen.

## STAGE 2 Wheel clamping



- ✓ **New patented wheel clamp system:**
  - Fast
  - User-friendly
  - Reliable for all wheel types
  - (comes equipped with additional specific flanges and cones)



**INTELLIGENT  
ELECTROMECHANICAL TURNTABLE**

## STAGE 3 BEAD BREAKING of upper and lower bead

- ✓ **Upper hydraulic bead breaking operation:** the disc is lowered and the wheel moves in a special way to facilitate the bead breaking operation with a controlled penetration path.



- ✓ **Lower hydraulic bead breaking operation:** a second, separate disc is lifted and the wheel moves in a special way to facilitate the bead breaking operation with a controlled penetration path.



**MULTI-FUNCTIONAL REVOLVER TOOL**  
4 TOOLS - 3 POSITIONS - AUTOMATIC ROTATION

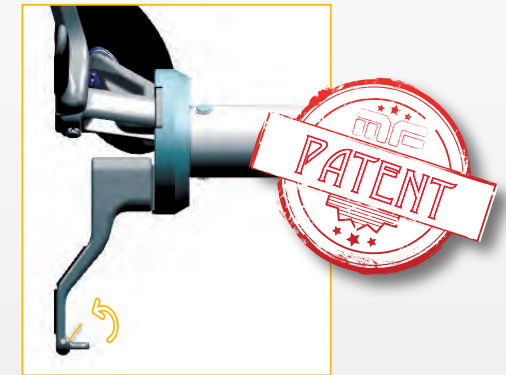
**MOBILE COUPLING LOWER  
TOOL**





## STAGE 4 Upper bead DEMOUNTING

- ✓ The DEMOUNTING of the first upper bead is facilitated by the new tool with **mobile spring coupling**.  
This key feature allows any type of tyre to be coupled with no issues and in **maximum safety conditions, reducing tension and stress.**



**NEW TOOL**  
WITH MOBILE SPRING COUPLING

## STAGE 5 LOWER BEAD DEMOUNTING



## AUTOMATIC CYCLE

**NEW**



DISCOVER HOW IT WORKS  
WITH THE FULLY AUTOMATIC CYCLE

- ✓ The separate lower bead breaker disc goes up until it brings the tyre to the demounting position, a process that can be facilitated by the **simultaneous movement of the WHEEL UNIT.**

## STAGE 6 ASSEMBLY of lower and upper bead



- ✓ The upper BEAD BREAKER DISC and the integrated plastic roller push the tyre inside the rim.
- ✓ The lower arm tool, also **radially self-positioned**, can assist this process where needed.



- ✓ By positioning the assembly tool of the REVOLVER between the rim and the tyre, the REVOLVER's PLASTIC ROLLER will automatically help the tyre to stay within the channel.

The turntable rotation and the help of the rotating bead pressing tool fitted as standard **makes final assembly extremely easy.**



**Full ASSEMBLY operation aided by tool and presser always built-in in the same position.**



## Mobile control CONSOLE

- ✓ All work operations are controlled by the **freely positionable console**.



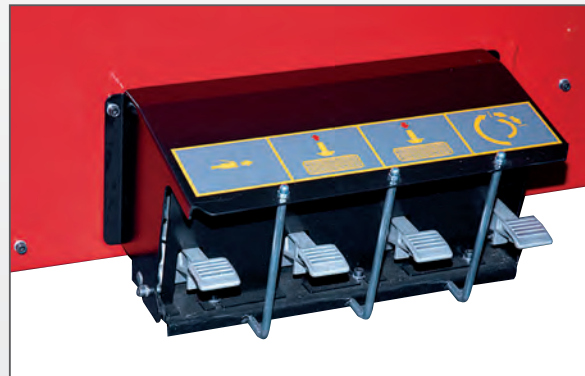
### User-friendly, quick and intuitive controls.

Extreme user-friendliness and absolute control in manual operating mode.

## Pedal unit

### ✓ 4-pedal pedal unit

- Turntable rotation.
- Wheel clamping.
- Wheel unlocking.
- Inflation.



## Standard equipment



## Recommended accessories

### A. 8-11100039

Inverted drop-centre rim flange.

### B 8-15100003

28 mm h spacer ring.

### B 8-11100087

Universal flange for special closed rims.



## Technical data

### Wheel dimension range:

|                                     |                 |
|-------------------------------------|-----------------|
| Rim diameter                        | from 13" to 32" |
| Max. tyre diameter                  | 1200 mm (47")   |
| Maximum tyre width                  | 400 mm (16")    |
| Upper and lower bead breaking force | 900 kg          |

### Electromechanical turntable

|                    |                        |
|--------------------|------------------------|
| Automatic clamping | with handle            |
| Rotation torque    | 1200 Nm                |
| Rotation speed     | 7-20 rpm               |
| Motor rating       | 2-speed inverter motor |
| Rotation speed     | 7-18 rpm               |

### Wheel lifter capacity 80 kg SL - 85kg PL

### Power supply

|  |                                   |
|--|-----------------------------------|
| Electric 1Ph   | 230V-0.98 kW 50Hz/60 Hz           |
| Electric 1Ph (alternative)                             | 115V-0.98 kW 50Hz/60 Hz           |
| Pneumatic operating pressure                           | 8 Bar                             |
| Hydraulic power unit motor.                            | 0.8 kW                            |
| Operating hydraulic pressure                           | 120 bar                           |
| Weight   | 500 kg<br>550 kg (PREMIUM lifter) |
| A-weighted sound pressure level (LpA) on the workplace | <70 dB(A)                         |

## Versions

|                  | LIFTER STD | LIFTER PREMIUM | BEAD DEPRESSOR | AUTOMATISM | VIDEO CAMERA | INFLATRON | TPMS | TREAD PROBE | TEMPERATURE SENSOR |
|------------------|------------|----------------|----------------|------------|--------------|-----------|------|-------------|--------------------|
| <b>BASE</b>      | *          |                | *              |            |              |           |      |             |                    |
| <b>VISION SL</b> | *          |                | *              |            | *            |           |      |             |                    |
| <b>VISION PL</b> |            | *              | *              |            | *            |           |      |             |                    |
| <b>SUPER SL</b>  | *          |                | *              |            | *            | *         |      |             |                    |
| <b>SUPER PL</b>  |            | *              | *              |            | *            | *         |      |             |                    |
| <b>PREMIUM</b>   |            | *              | *              | *          | *            | *         | *    | *           | *                  |

## Dimensions

